

San Luis Obispo County Integrated Proposal Reduce Delta Water Dependence

Reducing Delta Water Dependence

Attachment 15 consists of a summary with exhibits of the portions of the San Luis Obispo County Region's adopted IRWM Plan that address how implementation of the Region's IRWM Plan will reduce dependence on the water supply from the Sacramento-San Joaquin Delta (Delta).

Adopted Plan Summary

The San Luis Obispo County Region's (Region) IRWM Plan (Plan) includes reduction of dependence on imported water in its Water Supply goal (Exhibit A):

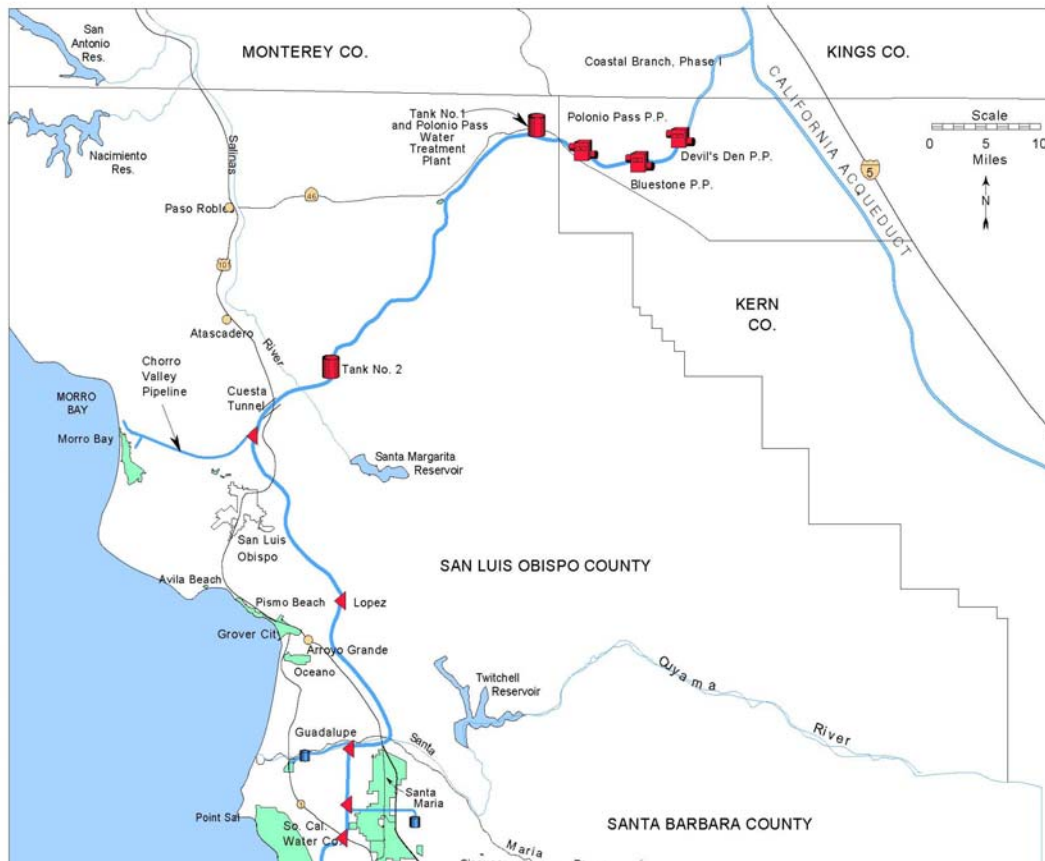
“Improve regional water supply reliability and security, **reduce dependence on imported water**, reduce water rights disputes and protect watershed communities from drought with a focus on interagency conjunctive use of regional water resources without unfairly burdening communities, neighborhoods or individuals.”

The Region's only imported supply is via the State Water Project, which is supplied by water imported from Northern California via the Delta and subsequent infrastructure. Table 15-1 lists the entities within the Region that receive State Water, their water service amounts and their drought buffer allocations (described in the next section), and Figure 15-1 is a map of the Region showing the location of State Water facilities.

Table 15-1: Region State Water Project Subcontractors

Contractor	Water Service Amount	Drought Buffer	Total Reserved
Chorro Valley Turnout			
Morro Bay, City of	1,313	2,290	3,603
California Mens Colony	400	400	800
County Operations Center	425	425	850
Cuesta College	<u>200</u>	<u>200</u>	<u>400</u>
Subtotal	2,338	3,315	5,653
Lopez Turnout			
Pismo Beach, City of	1,240	1,240	2,480
Oceano CSD	750	0	750
San Miguelito MWC	275	275	550
Avila Beach CSD	100	0	100
Avila Valley MWC	20	60	80
San Luis Coastal USD	<u>7</u>	<u>7</u>	<u>14</u>
Subtotal	2,392	1,582	3,974
Shandon			
	<u>100</u>	<u>0</u>	<u>100</u>
Subtotal	100	0	100
Total	4,830	4,897	9,727

Figure 15-1: Region State Water Project Facilities



Delta Water Use in the Region

The California Department of Water Resources (DWR) owns and operates the State Water Project (SWP). It is the largest state-built water and power project in the United States. The SWP first started delivering water to Californians in the 1960s and in 1963 the San Luis Obispo County Flood Control and Water Conservation District (District), which is the lead agency for the Region, contracted with DWR for **25,000 acre feet per year (AFY)** of State Water. The SWP began delivering water to the Central Coast in 1997 upon completion of the Coastal Branch conveyance and treatment facilities, serving Santa Barbara and San Luis Obispo counties.

The treatment facility for State Water delivered through the Coastal Branch, known as the Polonio Pass Water Treatment Plant (PPWTP), is owned, operated and maintained by the Central Coast Water Authority (CCWA) for users in San Luis Obispo and Santa Barbara Counties. The Coastal Branch conveyance system is owned by DWR, which also operates and maintains the raw water portion of the system. The portion of the aqueduct that conveys treated water is operated and maintained by CCWA. Agreements between CCWA, Santa Barbara County Flood Control and Water Conservation District, District and DWR are in place to establish these roles and relationships.

In San Luis Obispo County, decisions were made in the early 1990's by local municipalities and water purveyors that led to Water Service Amount (WSA) requests for portions of the District's 25,000 AFY allocation of State Water. After extensive policy discussions regarding the use of State Water, the District entered into Water Supply Agreements with the agencies identified in Table 15-1. Master Water Treatment and Coastal Branch construction agreements with CCWA were also approved for treatment of **4,830 AFY** of State Water, the cumulative total of WSA requests.

The SWP is considered a supplementary source of water supply as hydrologic variability, maintenance schedules, and repair requirements can cause reduced deliveries or complete shut down of the delivery system. Since delivery to the Central Coast began, the SWP has provided between 50 and 100 percent of the contracted allocations, but drought coupled with pumping restrictions in consideration of endangered species habitat lowered that amount to 35 percent in 2008 and 40 percent in 2009. To receive a greater portion of State Water, up to their full WSAs, during these shortages, most agencies have entered into **"Drought Buffer Water Agreements"** with the District for use of an additional portion of the District's SWP allocation, as shown in Table 15-1. For example, when the SWP can only deliver 50% of contracted allocations, an agency with a 100 AFY WSA and a 100 AFY drought buffer allocation can still receive its 100 AFY WSA – 50% of their 100 AFY WSA plus 50% of their 100 AFY drought buffer allocation equals 100 AFY. **Use of Drought Buffer Agreements is one mechanism by which dependence on Delta water is inherently reduced in the Region.**

Table 15-1 also illustrates that the District has 15,273 AFY of unsubscribed SWP allocation (District allocation (25,000 AFY) minus Total Reserved (9,727 AFY) equals 15,273 AFY), commonly referred to as the "excess allocation." Hydraulics, treatment plant capacity, and contractual terms and conditions limit how the excess allocation can be used. **This physical limitation on the amount of water the Region can receive from the Delta is another mechanism by which dependence on Delta water is inherently reduced in the Region.** Additionally, options for use of this excess allocation in years that it is available that help to reduce dependence on the water when it is not available are included in the Plan as discussed in the next section.

Relevant Plan Objectives and Projects

The Region's Plan includes four (4) Water Supply objectives and two (2) Groundwater Monitoring and Management objectives (Exhibit A) that relate to the goal of reducing dependence on Delta water by either optimizing the use of the Delta water when it is available or look to other sources of supply. Detailed descriptions of these objectives are included in the Region's Plan and as Exhibit B of this attachment. Examples of projects in the Region's Plan that implement these objectives are included below and as Exhibit C of this attachment.

Water Supply Objectives

1. Implement inter-agency projects including emergency inter-ties between systems, jointly developed facilities, water exchanges, and other methods of enhancing reliability through cooperative efforts over the development of new supplies.

2. Maximize water conservation for both M&I and agricultural uses.
3. Expand desalination water opportunities by 2010.
4. Expand reclaimed water use to make up 5% of total water use by 2010 and 10% of total water use by 2020.

Groundwater Monitoring and Management Objectives

2. Evaluate and consider Groundwater Banking Programs.
6. Recharge ground water with high quality water.

Table D1.2 of the Region's Plan (Exhibit C) demonstrates which projects and programs in the Plan meet these water supply and groundwater objectives. Section D of the Region's Plan includes descriptions of the projects and programs listed below that meet these objectives.

Example Projects and Programs from the Plan that will Reduce Dependence on Imported Water:

- Morro Bay Estuary Comprehensive Conservation and Management Plan
- Nacimiento Water Project
- Lopez Water Treatment Plan Upgrade
- Nipomo CSD Salt Management Program
- Chorro and Morro Groundwater Basin Management Plans
- Morro Bay Wastewater Treatment Facility Upgrade
- South San Luis Obispo County Sanitation District Facility Upgrade
- Paso Robles Groundwater Basin Water Banking Feasibility Study
- Los Osos Community Wastewater Project
- Nipomo CSD Supplemental Water Project

Retaining the Reducing Delta Water Dependence Objective in Future Plans

Provision 3.2 of the Regional Water Management Group's (RWMG) Memorandum of Understanding (Exhibit D) includes the goal of reducing dependence on imported water. Provision 5.4.5 of the MOU (Exhibit D) describes how the RWMG will propose changes to the previous versions of the Plan to comply with new State guidelines. Since the new State guidelines include eligibility standards for including addressing reduction in dependence on Delta water in the Plan, future updates to the Region's Plan will retain applicable goals and objectives.

Additionally, San Luis Obispo County's Conservation and Open Space Element (COSE) of the General Plan was recently updated to include Water Resources Policy 1.3, which says use of reclaimed water, interagency cooperative projects, desalination of contaminated groundwater supplies, and groundwater recharge projects **should be considered prior to using imported sources of water** or seawater desalination, or dams and on-stream reservoirs (Exhibit E). Per Provisions 5.4.2 and 2.9 of the MOU, the San Luis Obispo County Flood Control and Water Conservation District is the lead agency for the RWMG, and the District's Water Resources Advisory Committee (WRAC) is both the main advisor to the RWMG and made up of RWMG members. The WRAC reviewed and commented on the update to the COSE on September 2, 2009, with no changes recommended for the wording in the policy summarized above (Exhibit F). Therefore, updates of the Region's Plan will retain the goals for reducing dependence on imported water independent of State guidelines and eligibility requirements.

Exhibit A

Protect and improve water quality for beneficial uses consistent with regional interests and the Basin Plan in cooperation with local and state agencies and regional stakeholders without unfairly burdening communities, neighborhoods or individuals.

Water Quality Objectives

1. Protect and improve source water quality.
2. Meet all federal and state drinking water standards.
3. Support the development and implementation of TMDLs.
4. Implement NPDES Phase II Storm Water Management Programs.
5. Implement the California NPS Plan and the RWQCB Conditional Agricultural Waiver Program for irrigated agriculture.
6. Comply with new waste discharge requirements.

Water Supply Goal

Improve regional water supply reliability and security, reduce dependence on imported water, reduce water rights disputes and protect watershed communities from drought with a focus on interagency conjunctive use of regional water resources without unfairly burdening communities, neighborhoods or individuals.

Water Supply Objectives

1. Implement inter-agency projects including emergency inter-ties between systems, jointly developed facilities, water exchanges, and other methods of enhancing reliability through cooperative efforts over the development of new supplies.
2. Maximize water conservation for both M&I and agricultural uses.
3. Expand desalination water opportunities by 2010.
4. Expand reclaimed water use to make up 5% of total water use by 2010 and 10% of total water use by 2020.

Ecosystem Preservation and Restoration Goal

Protect, enhance and restore the region's natural resources including open spaces; fish, wildlife and migratory bird habitat; special status and native plants; wetlands; estuarine, marine, and coastal ecosystems; streams, lakes, and reservoirs; forests; and agricultural lands without unfairly burdening communities, neighborhoods or individuals.

Ecosystem Preservation and Restoration Objectives

1. Purchase or conserve through easements, preserve, enhance, and restore land in ecologically sensitive ecosystems.
2. Manage public land access to encourage public involvement and stewardship.
3. Manage stream flows to fish bearing streams, support a region-wide fish passage barrier prevention, circumvention and removal program, and implement fish friendly stream and river corridor restoration projects.
4. Reduce the effects of invasive plant species, manage public properties to re-establish rare and special status native plant populations, and promote native drought tolerant plantings in municipal and residential landscaping.
5. Implement the San Luis Obispo County Native Tree Management Guidelines and promote the voluntary guidelines in the San Luis Obispo County Native Tree Resolution for tree protection and restoration programs, urban forest management, and wild lands fire management.
6. Reuse reclaimed mine lands for beneficial purposes.
7. Conserve natural resources.

Groundwater Monitoring and Management Goal

Monitor, protect, and improve the regions groundwater through a collaborative approach designed to reduce conflicts without unfairly burdening communities, neighborhoods or individuals.

Groundwater Monitoring and Management Objectives

1. Develop monitoring and reporting programs for groundwater basins in the region.
2. Evaluate and consider Groundwater Banking Programs.
3. Protect and improve groundwater quality from point and non-point source pollution, including nitrate contamination; MTBE and other industrial, agricultural, and commercial sources of contamination; naturally occurring mineralization, boron, radionuclide, geothermal contamination; and seawater intrusion and salts.
4. Conduct public education and outreach about ground water protection.
5. Identify areas of known or expected conflicts and target stakeholders on specific actions that they should take to help protect groundwater basin quality and supply.
6. Recharge ground water with high quality water.

Exhibit B

Table C2.7 Wastewater Treatment System Upgrade Status

Community	Status
Los Osos	Community sewer system planned. SLO County is currently evaluating alternatives
Morro Bay	WWTP has been operating on a waiver and needs an upgrade to meet secondary treatment standards. City of Morro Bay is pursuing an upgrade to tertiary treatment
San Luis Obispo	Upgrade needed within 5-10 years
Atascadero	Upgrade planned
Avila Beach	Upgrade needed in 5-10 years
Pismo Beach	New plant went on line January 2006
California Men's Colony	Upgrade is in progress

C3. Water Supply Objectives

The water supply objectives support the goal of a reliable and secure water supply for the region. The following paragraphs further describe the water supply objectives.

1. Implement inter-agency projects including emergency inter-ties between systems, jointly developed facilities, water exchanges, and other methods of enhancing reliability through cooperative efforts over the development of new supplies.

The first water supply objective is to continue the progress of inter-agency cooperation and implementation and to benefit from and better utilize existing infrastructure and supplies. This is an approach that will help all agencies participating in the cooperative effort. As stated in the California Water Plan Update:

Regions have opportunities not available to individual water suppliers. Water suppliers that form partnerships with other entities in the region can accomplish projects that provide benefits that no single agency could do alone. For example, partnerships may allow agencies to improve their water supply reliability by establishing emergency connections with neighboring water suppliers; increase operational flexibility by participating in regional groundwater management and conjunctive use; protect water quality by participating in regional watershed management; reduce costs by cooperating with other agencies on water conservation and outreach programs; facilitate new projects by contributing to local habitat conservation plans; and help achieve many other regional resource management objectives.

For example, in the San Luis Obispo Region, the Nipomo Pipeline Project will import water from the City of Santa Maria in Santa Barbara County to the community of Nipomo. Currently

groundwater is the only water source in Nipomo and this supply is approaching its limit. The addition of this supplemental source will improve the reliability of those systems in Nipomo and alleviate groundwater conflicts in the region.

2. Maximize water conservation for both M&I and agricultural uses.

The water conservation objective is a commitment by the region to continue to pursue water use reduction activities. The region has aggressively implemented water conservation measures and further water use reductions will be challenging, but water conservation is one of the most effective ways to manage demands and the region is committed to continuing conservation measures.

All fourteen BMP's identified by the California Urban Water Conservation Council (CUWCC), in addition to agricultural BMP's in the county's Agricultural Element and Open Space Element, will be considered as described below. The region has included an additional measure of updating local codes to simplify grey-water re-use.

- BMP 01 Water Survey Programs for Single-Family and Multi-Family Residential Customers
- BMP 02 Residential Plumbing Retrofit: Implement plumbing retrofit programs in communities that have not done so already.
- BMP 03 System Water Audits, Leak Detection and Repair: Evaluate total system losses as a part of each of the water master plan updates.
- BMP 04 Metering with Commodity Rates for all New Connections and Retrofit of Existing: Evaluate and record the effectiveness of the existing retrofit programs that have already been initiated. Include the results with the annual reports.
- BMP 05 Large Landscape Conservation Programs and Incentives: Continue the use of the mobile lab for reviewing agriculture, park, and other large irrigation systems throughout the County.
- BMP 06 High-Efficiency Washing Machine Rebate Programs: Consider instituting as a part of the retrofit programs.
- BMP 07 Public Information Programs: Continue promoting and educating water users on conservation BMPs.
- BMP 08 School Education Programs: Promote water conservation education as a part of an elementary school science program.
- BMP 09 Conservation Programs for Commercial, Industrial, and Institutional (CII) Accounts: Limited effort has been applied to this objective thus far. Consider a program to identify CII users within each of the water systems and evaluate each type for water use. Beginning with the larger water users, work with the user on ways to reduce water demand.
- BMP 10 Wholesale Agency Assistance Programs: All of the agencies served by the District are already actively promoting water conservation. Other than the objectives identified elsewhere in this plan, no additional assistance or financial incentive is anticipated.
- BMP 11 Conservation Pricing: Develop model water rate schedules to be used by purveyors to encourage conservation by individual water users.
- BMP 12 Conservation Coordinator: Ensure that all water purveying entities are adequately staffed to oversee and implement water conservation programs.

- **BMP 13 Water Waste Prohibition:** Implement methods to reduce or eliminate gutter flooding, single pass cooling systems, non-recirculating systems in car wash and commercial laundry systems, and non-recycling decorative water fountains. Promote the use of efficient demand-initiated regenerative water softeners.
- **BMP 14 Residential ULFT Replacement Programs:** Implement plumbing retrofit programs in communities that have not done so already.
- **Update local codes to simplify grey-water re-use:** Explore opportunities that allow for increase use of grey water for landscaping or other uses.

3. Expand desalination water opportunities by 2010.

As stated in the California Water Plan Update, the benefits of desalination are:

- *Increase in water supply*
- *Reclamation and beneficial use of waters of impaired quality*
- *Increased water supply reliability during drought periods*
- *Diversification of water supply sources*
- *Improved water quality*
- *Protection of public health*

The San Luis Obispo region appreciates these benefits and understands how desalination can be an integral part of the long-term water management strategy for the region and help reduce dependence on imported supplies. The region will support the expansion of desalination opportunities by:

- Monitoring and exploring new technologies that lower the cost of desalination.
- Searching for new funding sources for desalination projects.
- Identifying potential partners for desalination projects (i.e. power plants, cogen site, etc.).

4. Expand reclaimed water use to make up 5% of total water use by 2010 and 10% of total water use by 2020.

Reclaimed water is valued as a local, drought proof, reliable water supply. Like desalination, reclaimed water can be an integral part of the long-term water management strategy for the region and help reduce the dependence on imported supplies.

The region will support the expansion of reclaimed water use by:

- Monitoring and exploring new technologies that lower the cost of advanced tertiary treatment.
- Searching for new funding sources for advanced tertiary treatment projects.
- Identifying potential partners for advanced tertiary treatment projects (i.e. agriculture, park fields, PxP, etc.).
- Update local codes to simplify grey-water re-use.
- Explore opportunities for groundwater recharge with reclaimed water.

Newer technology is available that may allow determining draw down, seasonal variations, and quality in a cost effective manner.

Monitoring for sea water intrusion is currently being performed but may need additional emphasis in the future. Efforts between individual purveyors, USGS, DWR, and/or the District should be coordinated and re-evaluated for completeness. Those basins that are susceptible to damage should be identified and the risk for damage should be assessed.

2. Evaluate and consider Groundwater Banking Programs.

Groundwater banking may provide an opportunity to store surplus water to be used later when needed. The banked water can be made available in drier years or at other times when a regular source of supply is interrupted.

The Paso Robles groundwater basin is a basin within the region that maybe capable of long term storage or banking. This basin may provide an opportunity to bank the region's excess State Water project allocation and thus allow for increasing the reliability of the State Water project delivery requests within the region and for improving local groundwater resources. Since the coastal branch of the State Water project also serves Santa Barbara County, joint participation in a project with the Central Coast Water Authority is currently being considered.

3. Protect and improve groundwater quality from point and non-point source pollution, including nitrate contamination; MTBE and other industrial, agricultural, and commercial sources of contamination; naturally occurring mineralization, boron, radionuclide, geothermal contamination; and seawater intrusion and salts.

There are numerous potential sources of point and non-point groundwater pollution and even more strategies and approaches to deal with the potential sources. Some of the strategies and measures in the San Luis Obispo region that will help meet this objective include:

- A. Continue and comply with post-closure operations of those landfills that create risks to groundwater supplies.
- B. Continue enforcement covering operations of existing landfills to protect groundwater quality.
- C. Update Watershed evaluations to identify new potential sources of contamination.
- D. Enforce land-use regulations to ensure land use activities do not contribute to groundwater pollution.

4. Conduct public education and outreach about ground water protection.

Many property owners are not aware of their ground water protection opportunities or responsibilities. A public information and education program should be developed in selected locations to inform residents and property owners about groundwater protection and issues, their responsibilities, best management practices, and how to get assistance.

Seawater intrusion tends to be a result of pumping by several parties. Therefore a solution will need to be a cooperative effort by those parties. Awareness and understanding of the issues are necessary to bring this cooperation about. A public education and outreach program specifically targeted at coastal groundwater pumpers is an objective of the San Luis Obispo region.

5. Identify areas of known or expected conflicts and target stakeholders on specific actions that they should take to help protect groundwater basin quality and supply.

The primary strategy to meet this objective will be to continue to pursue cooperative resolution of groundwater issues that have been the subject of litigation for the beneficial implementation of settlement agreements and to develop cooperative agreements among stakeholders in groundwater areas where litigation may be imminent. Providing expertise, historical data and other technical resources normally available to the District can often be used to facilitate cooperation.

However, as a measure of last resort, regional ordinances on groundwater management that might be implemented under governmental police powers will be considered. Exercising the use of police powers has been used in other counties, but has historically been avoided in this region. Exploring the circumstances and the effectiveness of ordinances in other jurisdictions can verify if a future ordinance could be considered a useful or a counter-productive option.

6. Recharge ground water with high quality water.

The California Water Plan Update states the importance of protecting groundwater recharge:

Protection of recharge areas is important, but protecting recharge areas by itself does not provide a supply of water. Recharge areas only function when aquifer storage capacity is available, and when regional and local governments and agencies work together to secure an adequate supply of good quality water to recharge the aquifer. Protecting existing and potential recharge areas allows them to serve as valuable components of a conjunctive management and groundwater strategy.

San Luis Obispo County obtains nearly 80 percent of its water from groundwater supplies and protecting the quantity and quality of the groundwater resources is critical to a reliable water supply for the region.

C6. Flood Management Objectives

Flood protection is a high priority for the San Luis Obispo region. The flood protection objectives were developed with the recognition that local financing options are limited, community support is critical, and other watershed benefits need to be integrated into flood protection measures.

Exhibit C

Table D1.2 Relationship between Projects/Programs/Policies under their Main Water Resource Management Strategy and IRWM Plan Goals and Objectives

OBJECTIVES	WATER QUALITY						WATER SUPPLY				ECOSYSTEM RESTORATION AND PRESERVATION							GROUNDWATER MONITORING AND MANAGEMENT						FLOOD MANAGEMENT						
	Protect and Improve Source Water Quality	Meet Drinking Water Standards	Development and Implementation of TMDLs	Implement NPDES Phase 2 Stormwater Programs	Support NPS Plan and Conditional Ag Waiver	Comply with new Waste Discharge Requirements	Implement Inter-Agency Projects	Maximize Water Conservation	Expand Desalination	Expand Reclaimed Water	Protect Ecologically Sensitive Lands	Manage Public Land Access to Promote Stewardship	Implement Fish Friendly Projects	Reduce Invasive Plants and Promote Native Plants	Manage Forests to Minimize Wildfires	Reuse Reclaimed Mines	Conserve Natural Resources	Monitor the Region's Groundwater Basins	Evaluate Groundwater Banking Programs	Protect Groundwater from Point and Non-Point Pollution	Groundwater Public Outreach and Education	Groundwater Conflict Resolution	Groundwater Recharge with High Quality Water	Distinguish Root Cause of Flooding	Integrate Ecosystem, Drainage, Recharge in Dev.	Develop Financial Programs	Minimize Risk of Dam/Levee Failure	Public Outreach, Education and Advocacy		
STRATEGIES/PROJECTS/PROGRAMS/PLANS	ECOSYSTEM RESTORATION																													
	Waterways Vegetation Management Program																													
	Mined Lands Remediation Program																													
	Invasive Species Program																													
	ENVIRONMENTAL / HABITAT PROTECTION AND IMPROVEMENT																													
	Steelhead 4(d) Program																													
	Arroyo Grande Watershed HCP																													
	Morro Bay Estuary Comprehensive Conservation and Management Plan																													
	WATER SUPPLY RELIABILITY																													
	Nacimiento Water Project																													
	San Miguel CSD Water System Improvements																													
	San Simeon CSD Water System Improvements																													
	Lopez Water Treatment Plant Upgrade																													
	Templeton CSD Water System Improvements																													
	Cambria CSD Water System Improvements																													
	FLOOD MANAGEMENT																													
	Flood Control Zone 1/1A Waterway Management Program																													
	Flood Control Zone 9 Waterway Management Program																													
	Federal Flood Insurance Program Compliance Study																													
	Flood Management Plan																													
	GROUNDWATER MANAGEMENT																													
	Nipomo CSD Salt Management Program																													
	Los Osos Water System Improvements																													
	Chorro and Morro Groundwater Basin Management Plans																													
	Edna Valley Groundwater Basin Study																													
	Groundwater Management Ordinance Study																													

OBJECTIVES	WATER QUALITY						WATER SUPPLY				ECOSYSTEM RESTORATION AND PRESERVATION							GROUNDWATER MONITORING AND MANAGEMENT					FLOOD MANAGEMENT					
	Protect and Improve Source Water Quality	Meet Drinking Water Standards	Development and Implementation of TMDLs	Implement NPDES Phase 2 Stormwater Programs	Support NPS Plan and Conditional Ag Waiver	Comply with new Waste Discharge Requirements	Implement Inter-Agency Projects	Maximize Water Conservation	Expand Desalination	Expand Reclaimed Water	Protect Ecologically Sensitive Lands	Manage Public Land Access to Promote Stewardship	Implement Fish Friendly Projects	Reduce Invasive Plants and Promote Native Plants	Manage Forests to Minimize Wildfires	Reuse Reclaimed Mines	Conserve Natural Resources	Monitor the Region's Groundwater Basins	Evaluate Groundwater Banking Programs	Protect Groundwater from Point and Non-Point Pollution	Groundwater Public Outreach and Education	Groundwater Conflict Resolution	Groundwater Recharge with High Quality Water	Distinguish Root Cause of Flooding	Integrate Ecosystem, Drainage, Recharge in Dev.	Develop Financial Programs	Minimize Risk of Dam/Levee Failure	Public Outreach, Education and Advocacy
RECREATION AND PUBLIC ACCESS	X			X	X			X	X		X	X		X			X			X			X		X			
STORMWATER CAPTURE AND MANAGEMENT																												
Cambria Flood Control Project	X		X	X	X		X	X	X		X		X										X		X	X		
San Miguel Flood Control Project	X		X	X	X		X	X	X				X										X		X	X		
WATER CONSERVATION																												
Conservation Element	X		X	X	X	X	X	X	X	X	X						X	X			X		X		X			
WATER QUALITY PROTECTION AND IMPROVEMENT																												
Atascadero Wastewater System Upgrade	X		X			X	X		X	X																		
Avila Beach Wastewater System Upgrade	X		X	X	X	X	X		X	X			X								X		X					
California Men's Colony Wastewater System Upgrade	X		X	X	X	X	X	X	X	X	X																	
San Miguelito Wastewater System Upgrade	X		X	X		X	X	X	X	X																		
Pismo Beach Wastewater System Upgrade	X		X	X		X	X	X	X	X																		
Copper Piping Impact Study		X	X				X																					
Landfill Regulation Compliance Study	X		X	X		X	X	X	X	X	X																	
WATER RECYCLING																												
San Simeon Wastewater Treatment Facility Upgrade	X		X	X		X	X	X	X	X	X	X					X			X					X			
Morro Bay Wastewater Treatment Facility Upgrade	X		X	X		X	X		X	X	X	X	X				X	X		X	X	X	X		X			
Southland Wastewater Treatment Facility Upgrade	X		X	X		X		X	X	X			X				X	X		X	X	X	X		X			
San Luis Obispo Reclamation Facility Upgrade	X		X	X		X							X				X	X		X	X	X	X		X			
South San Luis Obispo County Sanitation District Facility Upgrade	X		X	X		X	X						X				X	X		X	X	X	X		X			
Paso Robles Reclamation and Recharge Program	X		X	X		X							X				X	X		X	X	X	X		X			
WETLANDS ENHANCEMENT AND CREATION																												
Wetland and Vernal Pool Mapping	X		X	X	X						X	X		X			X	X		X			X		X			
CONJUNCTIVE USE																												
Paso Robles Groundwater Basin Water Banking Feasibility Study	X		X				X											X		X	X	X	X		X			
Groundwater Recharge Optimization Program	X		X				X			X	X		X				X	X		X			X		X			
DESALINATION																												
Morro Bay Desalination Facility Upgrade	X	X						X	X									X	X	X	X	X	X		X			

Exhibit D

interrelate, e.g. wastewater treatment and water recycling or habitat restoration.

2.9 Water Resources Advisory Committee (WRAC). This is the committee comprised of water purveyor, resource conservation district, environmental and agricultural representatives that was originally established in the 1940's to advise the Board of Supervisors for the San Luis Obispo County Flood Control and Water Conservation District (District) on water resource issues. The WRAC meets monthly, with the exception of July and August, and is subject to the Brown Act. The members of the WRAC with the authority to enter into an MOU are the same agencies that would comprise a RWMG to support the region's IRWM planning efforts. Therefore, RWMG Members and other regional stakeholder groups participate in the IRWMP development process by way of presentations to the Water Resources Advisory Committee (WRAC).

3. GOALS OF THE IRWMP

The goals of the IRWMP are to without unfairly burdening communities, neighborhoods, or individuals:

3.1 Protect and improve water quality for beneficial uses consistent with regional interests and the Basin Plan in cooperation with local and state agencies and regional stakeholders.

3.2 Improve regional water supply reliability and security, reduce dependence on imported water, reduce water rights disputes and protect watershed communities from drought with a focus on interagency conjunctive use of regional water resources.

3.3 Protect, enhance and restore the region's natural resources including open spaces; fish, wildlife and migratory bird habitat; special status and native plants; wetlands; estuarine, marine, and coastal ecosystems; streams, lakes, and reservoirs; forests; and agricultural lands.

3.4 Monitor, protect, and improve the regions groundwater through a collaborative approach designed to reduce conflicts.

3.5 Develop, fund, and implement an integrated, watershed approach to flood management through a collaborative and community supported process.

4. IRWMP PROJECT PARTICIPANTS

Development and implementation of the Region's IRWMP is a collaborative effort undertaken by the RWMG. The RWMG is being led by the District, in partnership with other signatories to this MOU. The IRWMP will be developed in coordination with the WRAC. However, only regional projects and programs to be implemented by signatories to this MOU will be eligible for grant applications. The signatories entering into this MOU are specifying their shared intent to coordinate and collaborate on water management issues as expressed in Section 3. Goals of the IRWMP and in accordance with Section 5. Mutual Understandings. The

execution of grant agreements with the State, and execution of agreements with RWMG members responsible for the implementation of projects that are awarded grants.

5.4.3 RWMG Member Responsibilities. All members, in a timely fashion, will provide information sufficient to meet State guidelines for their regional projects and programs to be included in the IRWMP and participate in the review of the IRWMP. All Members will participate in the process to select IRWMP regional projects and programs for grant applications. Members responsible for the implementation of regional projects and programs awarded grant funding will be responsible, through contract with the District, for complying with the provisions of the District's grant agreement with the State. Members will provide the District with their designated representative's contact information. Members will adopt the IRWMP in accordance with 5.5 and 5.6 below.

5.4.4 Stakeholder Participation. RWMG Members and other regional stakeholder groups participate in the IRWMP development process by way of presentations to the Water Resources Advisory Committee (WRAC). Stakeholders that are not WRAC members will be notified of when an IRWMP item will be reviewed by the WRAC. Sub-regional meetings may be required to ensure all stakeholders, including disadvantaged communities, who may not necessarily be able to attend WRAC meetings, can participate in IRWMP development.

5.4.5 IRWMP Development and Implementation. The Region's IRWMP that was adopted by the District, developed in coordination with and approved by stakeholders in 2005, and updated in 2007, will be the basis for the next and subsequent adopted IRWMPs for the Region. The RWMG will propose changes to the previous versions of the IRWMP to comply with new State guidelines and incorporate new information and projects, for review and approval in accordance with 5.5 and 5.6 below. Since a key element of the IRWM Program is integration, the RWMG will work with other WRAC Members to identify water management strategies for the region and the priority projects that demonstrate how these strategies work together to protect and improve water quality; improve regional water supply reliability and security; protect, enhance and restore the region's natural resources; monitor, protect, and improve the region's groundwater; and develop, fund, and implement an integrated, watershed approach to flood management. Regional projects and programs would be categorized and opportunities to identify regional benefits of linkages between multiple water management strategies among projects and programs of separate service functions and to see where projects and programs of separate service functions may further interrelate, e.g. wastewater treatment and water recycling or habitat restoration.

5.5 Decision-making. The WRAC will serve as the main advisor to the RWMG on decisions to be made on the IRWMP. Written consensus will be sought between the representatives of RWMG members in the event the need for a decision arises that cannot be brought forth to the WRAC before a decision needs to be made.

Exhibit E

Relationship to Other Elements, Plans and Programs

This chapter links water supply and land use planning, and it integrates the County's Integrated Regional Water Management (IRWM) Plan with the General Plan. A primary goal of the IRWM Plan is to integrate water supply management with management of water for other purposes such as ecosystem health and flood control. The quality objectives in the IRWM are consistent with the intent of Safe Drinking Water Act goals to protect drinking water "from source to tap." They are also consistent with broader Clean Water Act goals for clean, fishable, and swimmable waters.

In addition to the IRWM Plan, this chapter is closely related to the Strategic Growth principles adopted by the Board of Supervisors that call for directing most growth to cities and communities while conserving agricultural resources and rural character in the rural areas. In order to do so, safe, reliable, and sustainable water supplies will need to be provided in urban areas. At the same time, groundwater supplies will need to be protected for agriculture in accordance with the Agriculture Element.

This chapter establishes comprehensive water policy for the unincorporated portion of the county. The goals, policies and implementation strategies in this chapter are consistent with the goals, policies and implementation strategies of other chapters of the COSE. The water resources policies deal with issues such as protecting groundwater for agriculture, limiting the effects of new development on groundwater basins, protecting water quality and quantity for environmental purposes, and conserving the water resources we currently use. Policies in Biological Resources, Open Space and Energy chapters also address these issues.

Major Issues

The following issues provide the framework for the goals, policies, and implementation strategies in this chapter. The issues deal with water supply, groundwater monitoring and management, water quality, conservation, water resource management, and flood control. The following is a summary of challenges facing the county.

San Luis Obispo County obtains nearly 80% of its water supply from groundwater. Only 2% of the county's supply comes from imported water and the remaining 17% of water supply is surface waters. The County has 30 groundwater basins.



Water Conservation means reducing water use, such as turning off taps, shortening shower times, and cutting back on outdoor irrigation.

Water Efficiency means replacing older technologies and practices in order to accomplish the same results with less water, for example, by replacing toilets with new low water using models and by installing “smart controllers” in irrigated areas.

Reclaimed water, sometimes called recycled water, is wastewater that has been treated to remove solids and certain impurities. After treatment, it may be used to recharge the aquifer, often irrigation, dust control, and fire suppression.

- d. Develop a GIS application identifying major land uses and quantifying water demands based on acreage, land use, and consumptive use statistics; and
- e. Identify any deficiencies and recommend projects, policies, and programs to address those deficiencies.

Policy WR 1.2 Conserve Water Resources

Water conservation is acknowledged to be the primary method to serve the county’s increasing population. Water conservation programs should be implemented countywide before more expensive and environmentally costly forms of new water are secured.

◇ **Implementation Strategy WR 1.2.1 Revise Resource Management System**

Revise the Resource Management System Annual Resource Summary Report to collect and report on water usage and trends, water rates and conservation programs (Also refer to **Implementation Strategy WR 4.2.1.**)

Policy WR 1.3 New Water Supply

Development of new water supplies should focus on efficient use of our existing resources. Use of reclaimed water, interagency cooperative projects, desalination of contaminated groundwater supplies, and groundwater recharge projects should be considered prior to using imported sources of water or seawater desalination, or dams and on-stream reservoirs.

Policy WR 1.4 Use reclaimed water

The County will be a leader in the use of reclaimed water. Support expanding the use of reclaimed water to make up at least 5% of total water use by 2015 and 10% of total water use by 2020.

◇ **Implementation Strategy WR 1.4.1 Reclaimed water: monitor technology**

Monitor, explore, and utilize new technologies that lower the cost of advanced tertiary treatment.

◇ **Implementation Strategy WR 1.4.2 Reclaimed water: identify funding sources**

Search for new funding sources for advanced tertiary treatment projects.



Exhibit F

MEMORANDUM

TO: Honorable Sarah Christie, County Planning Commission Chairperson
CC: SLO County Planning Commissioners
SLO County Board of Supervisors
James Caruso, County Department of Planning and Building
Michael Winn, Water Resources Advisory Committee Chairperson
FROM: Courtney Howard, WRAC Secretary and Public Works Staff
SUBJECT: Water Resources Advisory Committee Comments on the Water Chapter of the Conservation and Open Space Element and its associated appendices
DATE: September 3, 2009

The Water Resources Advisory Committee (WRAC) formed an ad hoc subcommittee to review the Water Chapter of the Conservation and Open Space Element (COSE) and its associated appendices.

As discussed in a letter to the Planning Commission dated August 27, 2009 from Michael Winn, WRAC Chairperson, the WRAC did consider the remainder of the subcommittee's COSE comments at their regular meeting on September 2, 2009.

Attached to this email are the complete comments on the Water Chapter of the COSE (and its associated appendices) from the WRAC for your consideration.

p. 10.5

Implementation Strategy WR 1.1.1 Implement an Expanded Water Master Plan

- c. Establish water demand and water efficiency monitoring programs in coordination with the County Planning Department's Resource Management System and the County Public Works' Master Water Plan to monitor municipal, industrial, agricultural, recreational, and environmental demand on an ongoing basis;

p. 10.6

Policy WR 1.3 New Water Supply

Development of new water supplies should focus first on efficient use of our existing resources. Use of reclaimed water, interagency cooperative projects, and groundwater recharge projects should be considered prior to using imported sources of water or seawater desalination.

◇ **[Retain] Policy WR 1.3**

Monitor and explore new technologies that lower the cost of desalination.

- ◇ Implementation Strategy 1.3.1 Work in concert with the DWR and other regulatory agencies to stay current with approved methods of facilitating desalination projects for the county's coastal communities. (See WR 1.15)

Policy WR 1.6 Water-dependent species

[Insert hyphen in "water-dependent"]

Implementation Strategy WR 1.6.1 Evaluate ecosystem water needs.

[spelling error: not "ecosytem"]